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Glu Asn Val Ser Leu Val Cys Pro Lys Asp Ala Thr Arg Phe Lys His
35 40 45

Leu Arg Lys Tyr Thr Tyr Asn Tyr Glu Ala Glu Ser Ser Ser Gly Val
50 55 60

Pro Gly Thr Ala Asp Ser Arg Ser Ala Thr Arg Ile Asn Cys Lys Val
65 70 75 80

Glu Leu Glu Val Pro Gln Leu Cys Ser Phe Ile Leu Lys Thr Ser Gln
85 90 95

Cys Thr Leu Lys Glu Val Tyr Gly Phe Asn Pro Glu Gly Lys Ala Leu
100 105 110

Leu Lys Lys Thr Lys Asn Ser Glu Glu Phe Ala Ala Ala Met Ser Arg
115 120 125

Tyr Glu Leu Lys Leu Ala Ile Pro Glu Gly Lys Gln Val Phe Leu Tyr
130 135 140

Pro Glu Lys Asp Glu Pro Thr Tyr Ile Leu Asn Ile Lys Arg Gly Ile
145 150 155 160

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Ile Ser Ala Leu Leu Val Pro Pro Glu Thr Glu Glu Ala Lys Gln Val
 165 170 175
 Leu Phe Leu Asp Thr Val Tyr Gly Asn Cys Ser Thr His Phe Thr Val
 180 185 190
 Lys Thr Arg Lys Gly Asn Val Ala Thr Glu Ile Ser Thr Glu Arg Asp
 195 200 205
 Leu Gly Gln Cys Asp Arg Phe Lys Pro Ile Arg Thr Gly Ile Ser Pro
 210 215 220
 Leu Ala Leu Ile Lys Gly Met Thr Arg Pro Leu Ser Thr Leu Ile Ser
 225 230 235 240
 Ser Ser Gln Ser Cys Gln Tyr Thr Leu Asp Ala Lys Arg Lys His Val
 245 250 255
 Ala Glu Ala Ile Cys Lys Glu Gln His Leu Phe Leu Pro Phe Ser Tyr
 260 265 270
 Asn Asn Lys Tyr Gly Met Val Ala Gln Val Thr Gln Thr Leu Lys Leu
 275 280 285
 Glu Asp Thr Pro Lys Ile Asn Ser Arg Phe Phe Gly Glu Gly Thr Lys
 290 295 300
 Lys Met Gly Leu Ala Phe Glu Ser Thr Lys Ser Thr Ser Pro Pro Lys
 305 310 315 320
 Gln Ala Glu Ala Val Leu Lys Thr Leu Gln Glu Leu Lys Lys Leu Thr
 325 330 335
 Ile Ser Glu Gln Asn Ile Gln Arg Ala Asn Leu Phe Asn Lys Leu Val
 340 345 350
 Thr Glu Leu Arg Gly Leu Ser Asp Glu Ala Val Thr Ser Leu Leu Pro
 355 360 365
 Gln Leu Ile Glu Val Ser Ser Pro Ile Thr Leu Gln Ala Leu Val Gln
 370 375 380
 Cys Gly Gln Pro Gln Cys Ser Thr His Ile Leu Gln Trp Leu Lys Arg
 385 390 395 400
 Val His Ala Asn Pro Leu Leu Ile Asp Val Val Thr Tyr Leu Val Ala
 405 410 415
 Leu Ile Pro Glu Pro Ser Ala Gln Gln Leu Arg Glu Ile Phe Asn Met
 420 425 430

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Ala Arg Asp Gln Arg Ser Arg Ala Thr Leu Tyr Ala Leu Ser His Ala
 435 440 445
 Val Asn Asn Tyr His Lys Thr Asn Pro Thr Gly Thr Gln Glu Leu Leu
 450 455 460
 Asp Ile Ala Asn Tyr Leu Met Glu Gln Ile Gln Asp Asp Cys Thr Gly
 465 470 475 480
 Asp Glu Asp Tyr Thr Tyr Leu Ile Leu Arg Val Ile Gly Asn Met Gly
 485 490 495
 Gln Thr Met Glu Gln Leu Thr Pro Glu Leu Lys Ser Ser Ile Leu Lys
 500 505 510
 Cys Val Gln Ser Thr Lys Pro Ser Leu Met Ile Gln Lys Ala Ala Ile
 515 520 525
 Gln Ala Leu Arg Lys Met Glu Pro Lys Asp Lys Asp Gln Glu Val Leu
 530 535 540
 Leu Gln Thr Phe Leu Asp Asp Ala Ser Pro Gly Asp Lys Arg Leu Ala
 545 550 555 560
 Ala Tyr Leu Met Leu Met Arg Ser Pro Ser Gln Ala Asp Ile Asn Lys
 565 570 575
 Ile Val Gln Ile Leu Pro Trp Glu Gln Asn Glu Gln Val Lys Asn Phe
 580 585 590
 Val Ala Ser His Ile Ala Asn Ile Leu Asn Ser Glu Glu Leu Asp Ile
 595 600 605
 Gln Asp Leu Lys Lys Leu Val Lys Glu Ala Leu Lys Glu Ser Gln Leu
 610 615 620
 Pro Thr Val Met Asp Phe Arg Lys Phe Ser Arg Asn Tyr Gln Leu Tyr
 625 630 635 640
 Lys Ser Val Ser Leu Pro Ser Leu Asp Pro Ala Ser Ala Lys Ile Glu
 645 650 655
 Gly Asn Leu Ile Phe Asp Pro Asn Asn Tyr Leu Pro Lys Glu Ser Met
 660 665 670
 Leu Lys Thr Thr Leu Thr Ala Phe Gly Phe Ala Ser Ala Asp Leu Ile
 675 680 685
 Glu Ile Gly Leu Glu Gly Lys Gly Phe Glu Pro Thr Leu Glu Ala Leu
 690 695 700

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Phe Gly Lys Gln Gly Phe Phe Pro Asp Ser Val Asn Lys Ala Leu Tyr
 705 710 715 720
 Trp Val Asn Gly Gln Val Pro Asp Gly Val Ser Lys Val Leu Val Asp
 725 730 735
 His Phe Gly Tyr Thr Lys Asp Asp Lys His Glu Gln Asp Met Val Asn
 740 745 750
 Gly Ile Met Leu Ser Val Glu Lys Leu Ile Lys Asp Leu Lys Ser Lys
 755 760 765
 Glu Val Pro Glu Ala Arg Ala Tyr Leu Arg Ile Leu Gly Glu Glu Leu
 770 775 780
 Gly Phe Ala Ser Leu His Asp Leu Gln Leu Leu Gly Lys Leu Leu Leu
 785 790 795 800
 Met Gly Ala Arg Thr Leu Gln Gly Ile Pro Gln Met Ile Gly Glu Val
 805 810 815
 Ile Arg Lys Gly Ser Lys Asn Asp Phe Phe Leu His Tyr Ile Phe Met
 820 825 830
 Glu Asn Ala Phe Glu Leu Pro Thr Gly Ala Gly Leu Gln Leu Gln Ile
 835 840 845
 Ser Ser Ser Gly Val Ile Ala Pro Gly Ala Lys Ala Gly Val Lys Leu
 850 855 860
 Glu Val Ala Asn Met Gln Ala Glu Leu Val Ala Lys Pro Ser Val Ser
 865 870 875 880
 Val Glu Phe Val Thr Asn Met Gly Ile Ile Ile Pro Asp Phe Ala Arg
 885 890 895
 Ser Gly Val Gln Met Asn Thr Asn Phe Phe His Glu Ser Gly Leu Glu
 900 905 910
 Ala His Val Ala Leu Lys Ala Gly Lys Leu Lys Phe Ile Ile Pro Ser
 915 920 925
 Pro Lys Arg Pro Val Lys Leu Leu Ser Gly Gly Asn Thr Leu His Leu
 930 935 940
 Val Ser Thr Thr Lys Thr Glu Val Ile Pro Pro Leu Ile Glu Asn Arg
 945 950 955 960
 Gln Ser Trp Ser Val Cys Lys Gln Val Phe Pro Gly Leu Asn Tyr Cys
 965 970 975

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Thr Ser Gly Ala Tyr Ser Asn Ala Ser Ser Thr Asp Ser Ala Ser Tyr
 980 985 990

Tyr Pro Leu Thr Gly Asp Thr Arg Leu Glu Leu Glu Leu Arg Pro Thr
 995 1000 1005

Gly Glu Ile Glu Gln Tyr Ser Val Ser Ala Thr Tyr Glu Leu Gln
 1010 1015 1020

Arg Glu Asp Arg Ala Leu Val Asp Thr Leu Lys Phe Val Thr Gln
 1025 1030 1035

Ala Glu Gly Ala Lys Gln Thr Glu Ala Thr Met Thr Phe Lys Tyr
 1040 1045 1050

Asn Arg Gln Ser Met Thr Leu Ser Ser Glu Val Gln Ile Pro Asp
 1055 1060 1065

Phe Asp Val Asp Leu Gly Thr Ile Leu Arg Val Asn Asp Glu Ser
 1070 1075 1080

Thr Glu Gly Lys Thr Ser Tyr Arg Leu Thr Leu Asp Ile Gln Asn
 1085 1090 1095

Lys Lys Ile Thr Glu Val Ala Leu Met Gly His Leu Ser Cys Asp
 1100 1105 1110

Thr Lys Glu Glu Arg Lys Ile Lys Gly Val Ile Ser Ile Pro Arg
 1115 1120 1125

Leu Gln Ala Glu Ala Arg Ser Glu Ile Leu Ala His Trp Ser Pro
 1130 1135 1140

Ala Lys Leu Leu Leu Gln Met Asp Ser Ser Ala Thr Ala Tyr Gly
 1145 1150 1155

Ser Thr Val Ser Lys Arg Val Ala Trp His Tyr Asp Glu Glu Lys
 1160 1165 1170

Ile Glu Phe Glu Trp Asn Thr Gly Thr Asn Val Asp Thr Lys Lys
 1175 1180 1185

Met Thr Ser Asn Phe Pro Val Asp Leu Ser Asp Tyr Pro Lys Ser
 1190 1195 1200

Leu His Met Tyr Ala Asn Arg Leu Leu Asp His Arg Val Pro Glu
 1205 1210 1215

Thr Asp Met Thr Phe Arg His Val Gly Ser Lys Leu Ile Val Ala
 1220 1225 1230

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Met	Ser	Ser	Trp	Leu	Gln	Lys	Ala	Ser	Gly	Ser	Leu	Pro	Tyr	Thr
	1235					1240					1245			
Gln	Thr	Leu	Gln	Asp	His	Leu	Asn	Ser	Leu	Lys	Glu	Phe	Asn	Leu
	1250					1255					1260			
Gln	Asn	Met	Gly	Leu	Pro	Asp	Phe	His	Ile	Pro	Glu	Asn	Leu	Phe
	1265					1270					1275			
Leu	Lys	Ser	Asp	Gly	Arg	Val	Lys	Tyr	Thr	Leu	Asn	Lys	Asn	Ser
	1280					1285					1290			
Leu	Lys	Ile	Glu	Ile	Pro	Leu	Pro	Phe	Gly	Gly	Lys	Ser	Ser	Arg
	1295					1300					1305			
Asp	Leu	Lys	Met	Leu	Glu	Thr	Val	Arg	Thr	Pro	Ala	Leu	His	Phe
	1310					1315					1320			
Lys	Ser	Val	Gly	Phe	His	Leu	Pro	Ser	Arg	Glu	Phe	Gln	Val	Pro
	1325					1330					1335			
Thr	Phe	Thr	Ile	Pro	Lys	Leu	Tyr	Gln	Leu	Gln	Val	Pro	Leu	Leu
	1340					1345					1350			
Gly	Val	Leu	Asp	Leu	Ser	Thr	Asn	Val	Tyr	Ser	Asn	Leu	Tyr	Asn
	1355					1360					1365			
Trp	Ser	Ala	Ser	Tyr	Ser	Gly	Gly	Asn	Thr	Ser	Thr	Asp	His	Phe
	1370					1375					1380			
Ser	Leu	Arg	Ala	Arg	Tyr	His	Met	Lys	Ala	Asp	Ser	Val	Val	Asp
	1385					1390					1395			
Leu	Leu	Ser	Tyr	Asn	Val	Gln	Gly	Ser	Gly	Glu	Thr	Thr	Tyr	Asp
	1400					1405					1410			
His	Lys	Asn	Thr	Phe	Thr	Leu	Ser	Cys	Asp	Gly	Ser	Leu	Arg	His
	1415					1420					1425			
Lys	Phe	Leu	Asp	Ser	Asn	Ile	Lys	Phe	Ser	His	Val	Glu	Lys	Leu
	1430					1435					1440			
Gly	Asn	Asn	Pro	Val	Ser	Lys	Gly	Leu	Leu	Ile	Phe	Asp	Ala	Ser
	1445					1450					1455			
Ser	Ser	Trp	Gly	Pro	Gln	Met	Ser	Ala	Ser	Val	His	Leu	Asp	Ser
	1460					1465					1470			
Lys	Lys	Lys	Gln	His	Leu	Phe	Val	Lys	Glu	Val	Lys	Ile	Asp	Gly
	1475					1480					1485			

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Gln Phe Arg Val Ser Ser Phe Tyr Ala Lys Gly Thr Tyr Gly Leu
 1490 1495 1500
 Ser Cys Gln Arg Asp Pro Asn Thr Gly Arg Leu Asn Gly Glu Ser
 1505 1510 1515
 Asn Leu Arg Phe Asn Ser Ser Tyr Leu Gln Gly Thr Asn Gln Ile
 1520 1525 1530
 Thr Gly Arg Tyr Glu Asp Gly Thr Leu Ser Leu Thr Ser Thr Ser
 1535 1540 1545
 Asp Leu Gln Ser Gly Ile Ile Lys Asn Thr Ala Ser Leu Lys Tyr
 1550 1555 1560
 Glu Asn Tyr Glu Leu Thr Leu Lys Ser Asp Thr Asn Gly Lys Tyr
 1565 1570 1575
 Lys Asn Phe Ala Thr Ser Asn Lys Met Asp Met Thr Phe Ser Lys
 1580 1585 1590
 Gln Asn Ala Leu Leu Arg Ser Glu Tyr Gln Ala Asp Tyr Glu Ser
 1595 1600 1605
 Leu Arg Phe Phe Ser Leu Leu Ser Gly Ser Leu Asn Ser His Gly
 1610 1615 1620
 Leu Glu Leu Asn Ala Asp Ile Leu Gly Thr Asp Lys Ile Asn Ser
 1625 1630 1635
 Gly Ala His Lys Ala Thr Leu Arg Ile Gly Gln Asp Gly Ile Ser
 1640 1645 1650
 Thr Ser Ala Thr Thr Asn Leu Lys Cys Ser Leu Leu Val Leu Glu
 1655 1660 1665
 Asn Glu Leu Asn Ala Glu Leu Gly Leu Ser Gly Ala Ser Met Lys
 1670 1675 1680
 Leu Thr Thr Asn Gly Arg Phe Arg Glu His Asn Ala Lys Phe Ser
 1685 1690 1695
 Leu Asp Gly Lys Ala Ala Leu Thr Glu Leu Ser Leu Gly Ser Ala
 1700 1705 1710
 Tyr Gln Ala Met Ile Leu Gly Val Asp Ser Lys Asn Ile Phe Asn
 1715 1720 1725
 Phe Lys Val Ser Gln Glu Gly Leu Lys Leu Ser Asn Asp Met Met
 1730 1735 1740

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Gly	Ser	Tyr	Ala	Glu	Met	Lys	Phe	Asp	His	Thr	Asn	Ser	Leu	Asn
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Ile	Ala	Gly	Leu	Ser	Leu	Asp	Phe	Ser	Ser	Lys	Leu	Asp	Asn	Ile
	1760					1765					1770			
Tyr	Ser	Ser	Asp	Lys	Phe	Tyr	Lys	Gln	Thr	Val	Asn	Leu	Gln	Leu
	1775					1780					1785			
Gln	Pro	Tyr	Ser	Leu	Val	Thr	Thr	Leu	Asn	Ser	Asp	Leu	Lys	Tyr
	1790					1795					1800			
Asn	Ala	Leu	Asp	Leu	Thr	Asn	Asn	Gly	Lys	Leu	Arg	Leu	Glu	Pro
	1805					1810					1815			
Leu	Lys	Leu	His	Val	Ala	Gly	Asn	Leu	Lys	Gly	Ala	Tyr	Gln	Asn
	1820					1825					1830			
Asn	Glu	Ile	Lys	His	Ile	Tyr	Ala	Ile	Ser	Ser	Ala	Ala	Leu	Ser
	1835					1840					1845			
Ala	Ser	Tyr	Lys	Ala	Asp	Thr	Val	Ala	Lys	Val	Gln	Gly	Val	Glu
	1850					1855					1860			
Phe	Ser	His	Arg	Leu	Asn	Thr	Asp	Ile	Ala	Gly	Leu	Ala	Ser	Ala
	1865					1870					1875			
Ile	Asp	Met	Ser	Thr	Asn	Tyr	Asn	Ser	Asp	Ser	Leu	His	Phe	Ser
	1880					1885					1890			
Asn	Val	Phe	Arg	Ser	Val	Met	Ala	Pro	Phe	Thr	Met	Thr	Ile	Asp
	1895					1900					1905			
Ala	His	Thr	Asn	Gly	Asn	Gly	Lys	Leu	Ala	Leu	Trp	Gly	Glu	His
	1910					1915					1920			
Thr	Gly	Gln	Leu	Tyr	Ser	Lys	Phe	Leu	Leu	Lys	Ala	Glu	Pro	Leu
	1925					1930					1935			
Ala	Phe	Thr	Phe	Ser	His	Asp	Tyr	Lys	Gly	Ser	Thr	Ser	His	His
	1940					1945					1950			
Leu	Val	Ser	Arg	Lys	Ser	Ile	Ser	Ala	Ala	Leu	Glu	His	Lys	Val
	1955					1960					1965			
Ser	Ala	Leu	Leu	Thr	Pro	Ala	Glu	Gln	Thr	Gly	Thr	Trp	Lys	Leu
	1970					1975					1980			
Lys	Thr	Gln	Phe	Asn	Asn	Asn	Glu	Tyr	Ser	Gln	Asp	Leu	Asp	Ala
	1985					1990					1995			

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Tyr	Asn	Thr	Lys	Asp	Lys	Ile	Gly	Val	Glu	Leu	Thr	Gly	Arg	Thr
	2000					2005					2010			
Leu	Ala	Asp	Leu	Thr	Leu	Leu	Asp	Ser	Pro	Ile	Lys	Val	Pro	Leu
	2015					2020					2025			
Leu	Leu	Ser	Glu	Pro	Ile	Asn	Ile	Ile	Asp	Ala	Leu	Glu	Met	Arg
	2030					2035					2040			
Asp	Ala	Val	Glu	Lys	Pro	Gln	Glu	Phe	Thr	Ile	Val	Ala	Phe	Val
	2045					2050					2055			
Lys	Tyr	Asp	Lys	Asn	Gln	Asp	Val	His	Ser	Ile	Asn	Leu	Pro	Phe
	2060					2065					2070			
Phe	Glu	Thr	Leu	Gln	Glu	Tyr	Phe	Glu	Arg	Asn	Arg	Gln	Thr	Ile
	2075					2080					2085			
Ile	Val	Val	Val	Glu	Asn	Val	Gln	Arg	Asn	Leu	Lys	His	Ile	Asn
	2090					2095					2100			
Ile	Asp	Gln	Phe	Val	Arg	Lys	Tyr	Arg	Ala	Ala	Leu	Gly	Lys	Leu
	2105					2110					2115			
Pro	Gln	Gln	Ala	Asn	Asp	Tyr	Leu	Asn	Ser	Phe	Asn	Trp	Glu	Arg
	2120					2125					2130			
Gln	Val	Ser	His	Ala	Lys	Glu	Lys	Leu	Thr	Ala	Leu	Thr	Lys	Lys
	2135					2140					2145			
Tyr	Arg	Ile	Thr	Glu	Asn	Asp	Ile	Gln	Ile	Ala	Leu	Asp	Asp	Ala
	2150					2155					2160			
Lys	Ile	Asn	Phe	Asn	Glu	Lys	Leu	Ser	Gln	Leu	Gln	Thr	Tyr	Met
	2165					2170					2175			
Ile	Gln	Phe	Asp	Gln	Tyr	Ile	Lys	Asp	Ser	Tyr	Asp	Leu	His	Asp
	2180					2185					2190			
Leu	Lys	Ile	Ala	Ile	Ala	Asn	Ile	Ile	Asp	Glu	Ile	Ile	Glu	Lys
	2195					2200					2205			
Leu	Lys	Ser	Leu	Asp	Glu	His	Tyr	His	Ile	Arg	Val	Asn	Leu	Val
	2210					2215					2220			
Lys	Thr	Ile	His	Asp	Leu	His	Leu	Phe	Ile	Glu	Asn	Ile	Asp	Phe
	2225					2230					2235			
Asn	Lys	Ser	Gly	Ser	Ser	Thr	Ala	Ser	Trp	Ile	Gln	Asn	Val	Asp
	2240					2245					2250			

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Thr	Lys 2255	Tyr	Gln	Ile	Arg	Ile 2260	Gln	Ile	Gln	Glu	Lys 2265	Leu	Gln	Gln
Leu	Lys 2270	Arg	His	Ile	Gln	Asn 2275	Ile	Asp	Ile	Gln	His 2280	Leu	Ala	Gly
Lys	Leu 2285	Lys	Gln	His	Ile	Glu 2290	Ala	Ile	Asp	Val	Arg 2295	Val	Leu	Leu
Asp	Gln 2300	Leu	Gly	Thr	Thr	Ile 2305	Ser	Phe	Glu	Arg	Ile 2310	Asn	Asp	Val
Leu	Glu 2315	His	Val	Lys	His	Phe 2320	Val	Ile	Asn	Leu	Ile 2325	Gly	Asp	Phe
Glu	Val 2330	Ala	Glu	Lys	Ile	Asn 2335	Ala	Phe	Arg	Ala	Lys 2340	Val	His	Glu
Leu	Ile 2345	Glu	Arg	Tyr	Glu	Val 2350	Asp	Gln	Gln	Ile	Gln 2355	Val	Leu	Met
Asp	Lys 2360	Leu	Val	Glu	Leu	Thr 2365	His	Gln	Tyr	Lys	Leu 2370	Lys	Glu	Thr
Ile	Gln 2375	Lys	Leu	Ser	Asn	Val 2380	Leu	Gln	Gln	Val	Lys 2385	Ile	Lys	Asp
Tyr	Phe 2390	Glu	Lys	Leu	Val	Gly 2395	Phe	Ile	Asp	Asp	Ala 2400	Val	Lys	Lys
Leu	Asn 2405	Glu	Leu	Ser	Phe	Lys 2410	Thr	Phe	Ile	Glu	Asp 2415	Val	Asn	Lys
Phe	Leu 2420	Asp	Met	Leu	Ile	Lys 2425	Lys	Leu	Lys	Ser	Phe 2430	Asp	Tyr	His
Gln	Phe 2435	Val	Asp	Glu	Thr	Asn 2440	Asp	Lys	Ile	Arg	Glu 2445	Val	Thr	Gln
Arg	Leu 2450	Asn	Gly	Glu	Ile	Gln 2455	Ala	Leu	Glu	Leu	Pro 2460	Gln	Lys	Ala
Glu	Ala 2465	Leu	Lys	Leu	Phe	Leu 2470	Glu	Glu	Thr	Lys	Ala 2475	Thr	Val	Ala
Val	Tyr 2480	Leu	Glu	Ser	Leu	Gln 2485	Asp	Thr	Lys	Ile	Thr 2490	Leu	Ile	Ile
Asn	Trp 2495	Leu	Gln	Glu	Ala	Leu 2500	Ser	Ser	Ala	Ser	Leu 2505	Ala	His	Met

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Lys	Ala	Lys	Phe	Arg	Glu	Thr	Leu	Glu	Asp	Thr	Arg	Asp	Arg	Met
	2510					2515					2520			
Tyr	Gln	Met	Asp	Ile	Gln	Gln	Glu	Leu	Gln	Arg	Tyr	Leu	Ser	Leu
	2525					2530					2535			
Val	Gly	Gln	Val	Tyr	Ser	Thr	Leu	Val	Thr	Tyr	Ile	Ser	Asp	Trp
	2540					2545					2550			
Trp	Thr	Leu	Ala	Ala	Lys	Asn	Leu	Thr	Asp	Phe	Ala	Glu	Gln	Tyr
	2555					2560					2565			
Ser	Ile	Gln	Asp	Trp	Ala	Lys	Arg	Met	Lys	Ala	Leu	Val	Glu	Gln
	2570					2575					2580			
Gly	Phe	Thr	Val	Pro	Glu	Ile	Lys	Thr	Ile	Leu	Gly	Thr	Met	Pro
	2585					2590					2595			
Ala	Phe	Glu	Val	Ser	Leu	Gln	Ala	Leu	Gln	Lys	Ala	Thr	Phe	Gln
	2600					2605					2610			
Thr	Pro	Asp	Phe	Ile	Val	Pro	Leu	Thr	Asp	Leu	Arg	Ile	Pro	Ser
	2615					2620					2625			
Val	Gln	Ile	Asn	Phe	Lys	Asp	Leu	Lys	Asn	Ile	Lys	Ile	Pro	Ser
	2630					2635					2640			
Arg	Phe	Ser	Thr	Pro	Glu	Phe	Thr	Ile	Leu	Asn	Thr	Phe	His	Ile
	2645					2650					2655			
Pro	Ser	Phe	Thr	Ile	Asp	Phe	Val	Glu	Met	Lys	Val	Lys	Ile	Ile
	2660					2665					2670			
Arg	Thr	Ile	Asp	Gln	Met	Gln	Asn	Ser	Glu	Leu	Gln	Trp	Pro	Val
	2675					2680					2685			
Pro	Asp	Ile	Tyr	Leu	Arg	Asp	Leu	Lys	Val	Glu	Asp	Ile	Pro	Leu
	2690					2695					2700			
Ala	Arg	Ile	Thr	Leu	Pro	Asp	Phe	Arg	Leu	Pro	Glu	Ile	Ala	Ile
	2705					2710					2715			
Pro	Glu	Phe	Ile	Ile	Pro	Thr	Leu	Asn	Leu	Asn	Asp	Phe	Gln	Val
	2720					2725					2730			
Pro	Asp	Leu	His	Ile	Pro	Glu	Phe	Gln	Leu	Pro	His	Ile	Ser	His
	2735					2740					2745			
Thr	Ile	Glu	Val	Pro	Thr	Phe	Gly	Lys	Leu	Tyr	Ser	Ile	Leu	Lys
	2750					2755					2760			

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Ile	Gln	Ser	Pro	Leu	Phe	Thr	Leu	Asp	Ala	Asn	Ala	Asp	Ile	Gly
	2765					2770					2775			
Asn	Gly	Thr	Thr	Ser	Ala	Asn	Glu	Ala	Gly	Ile	Ala	Ala	Ser	Ile
	2780					2785					2790			
Thr	Ala	Lys	Gly	Glu	Ser	Lys	Leu	Glu	Val	Leu	Asn	Phe	Asp	Phe
	2795					2800					2805			
Gln	Ala	Asn	Ala	Gln	Leu	Ser	Asn	Pro	Lys	Ile	Asn	Pro	Leu	Ala
	2810					2815					2820			
Leu	Lys	Glu	Ser	Val	Lys	Phe	Ser	Ser	Lys	Tyr	Leu	Arg	Thr	Glu
	2825					2830					2835			
His	Gly	Ser	Glu	Met	Leu	Phe	Phe	Gly	Asn	Ala	Ile	Glu	Gly	Lys
	2840					2845					2850			
Ser	Asn	Thr	Val	Ala	Ser	Leu	His	Thr	Glu	Lys	Asn	Thr	Leu	Glu
	2855					2860					2865			
Leu	Ser	Asn	Gly	Val	Ile	Val	Lys	Ile	Asn	Asn	Gln	Leu	Thr	Leu
	2870					2875					2880			
Asp	Ser	Asn	Thr	Lys	Tyr	Phe	His	Lys	Leu	Asn	Ile	Pro	Lys	Leu
	2885					2890					2895			
Asp	Phe	Ser	Ser	Gln	Ala	Asp	Leu	Arg	Asn	Glu	Ile	Lys	Thr	Leu
	2900					2905					2910			
Leu	Lys	Ala	Gly	His	Ile	Ala	Trp	Thr	Ser	Ser	Gly	Lys	Gly	Ser
	2915					2920					2925			
Trp	Lys	Trp	Ala	Cys	Pro	Arg	Phe	Ser	Asp	Glu	Gly	Thr	His	Glu
	2930					2935					2940			
Ser	Gln	Ile	Ser	Phe	Thr	Ile	Glu	Gly	Pro	Leu	Thr	Ser	Phe	Gly
	2945					2950					2955			
Leu	Ser	Asn	Lys	Ile	Asn	Ser	Lys	His	Leu	Arg	Val	Asn	Gln	Asn
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Leu	Val	Tyr	Glu	Ser	Gly	Ser	Leu	Asn	Phe	Ser	Lys	Leu	Glu	Ile
	2975					2980					2985			
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	3005					3010					3015			

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Gly	Arg	His	Asp	Ala	His	Leu	Asn	Gly	Lys	Val	Ile	Gly	Thr	Leu
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Lys	Asn	Ser	Leu	Phe	Phe	Ser	Ala	Gln	Pro	Phe	Glu	Ile	Thr	Ala
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Ser	Thr	Asn	Asn	Glu	Gly	Asn	Leu	Lys	Val	Arg	Phe	Pro	Leu	Arg
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	3065					3070					3075			
Ser	Pro	Ser	Ala	Gln	Gln	Ala	Ser	Trp	Gln	Val	Ser	Ala	Arg	Phe
	3080					3085					3090			
Asn	Gln	Tyr	Lys	Tyr	Asn	Gln	Asn	Phe	Ser	Ala	Gly	Asn	Asn	Glu
	3095					3100					3105			
Asn	Ile	Met	Glu	Ala	His	Val	Gly	Ile	Asn	Gly	Glu	Ala	Asn	Leu
	3110					3115					3120			
Asp	Phe	Leu	Asn	Ile	Pro	Leu	Thr	Ile	Pro	Glu	Met	Arg	Leu	Pro
	3125					3130					3135			
Tyr	Thr	Ile	Ile	Thr	Thr	Pro	Pro	Leu	Lys	Asp	Phe	Ser	Leu	Trp
	3140					3145					3150			
Glu	Lys	Thr	Gly	Leu	Lys	Glu	Phe	Leu	Lys	Thr	Thr	Lys	Gln	Ser
	3155					3160					3165			
Phe	Asp	Leu	Ser	Val	Lys	Ala	Gln	Tyr	Lys	Lys	Asn	Lys	His	Arg
	3170					3175					3180			
His	Ser	Ile	Thr	Asn	Pro	Leu	Ala	Val	Leu	Cys	Glu	Phe	Ile	Ser
	3185					3190					3195			
Gln	Ser	Ile	Lys	Ser	Phe	Asp	Arg	His	Phe	Glu	Lys	Asn	Arg	Asn
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Asn	Ala	Leu	Asp	Phe	Val	Thr	Lys	Ser	Tyr	Asn	Glu	Thr	Lys	Ile
	3215					3220					3225			
Lys	Phe	Asp	Lys	Tyr	Lys	Ala	Glu	Lys	Ser	His	Asp	Glu	Leu	Pro
	3230					3235					3240			
Arg	Thr	Phe	Gln	Ile	Pro	Gly	Tyr	Thr	Val	Pro	Val	Val	Asn	Val
	3245					3250					3255			
Glu	Val	Ser	Pro	Phe	Thr	Ile	Glu	Met	Ser	Ala	Phe	Gly	Tyr	Val
	3260					3265					3270			

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Phe	Pro	Lys	Ala	Val	Ser	Met	Pro	Ser	Phe	Ser	Ile	Leu	Gly	Ser
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Asp	Val	Arg	Val	Pro	Ser	Tyr	Thr	Leu	Ile	Leu	Pro	Ser	Leu	Glu
	3290					3295					3300			
Leu	Pro	Val	Leu	His	Val	Pro	Arg	Asn	Leu	Lys	Leu	Ser	Leu	Pro
	3305					3310					3315			
His	Phe	Lys	Glu	Leu	Cys	Thr	Ile	Ser	His	Ile	Phe	Ile	Pro	Ala
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Met	Gly	Asn	Ile	Thr	Tyr	Asp	Phe	Ser	Phe	Lys	Ser	Ser	Val	Ile
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Thr	Leu	Asn	Thr	Asn	Ala	Glu	Leu	Phe	Asn	Gln	Ser	Asp	Ile	Val
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Ala	His	Leu	Leu	Ser	Ser	Ser	Ser	Ser	Val	Ile	Asp	Ala	Leu	Gln
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Tyr	Lys	Leu	Glu	Gly	Thr	Thr	Arg	Leu	Thr	Arg	Lys	Arg	Gly	Leu
	3380					3385					3390			
Lys	Leu	Ala	Thr	Ala	Leu	Ser	Leu	Ser	Asn	Lys	Phe	Val	Glu	Gly
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Ser	His	Asn	Ser	Thr	Val	Ser	Leu	Thr	Thr	Lys	Asn	Met	Glu	Val
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Ser	Val	Ala	Lys	Thr	Thr	Lys	Ala	Glu	Ile	Pro	Ile	Leu	Arg	Met
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Asn	Phe	Lys	Gln	Glu	Leu	Asn	Gly	Asn	Thr	Lys	Ser	Lys	Pro	Thr
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Glu	Ser	Leu	Thr	Ser	Tyr	Phe	Ser	Ile	Glu	Ser	Ser	Thr	Lys	Gly
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Asp	Val	Lys	Gly	Ser	Val	Leu	Ser	Arg	Glu	Tyr	Ser	Gly	Thr	Ile
	3500					3505					3510			
Ala	Ser	Glu	Ala	Asn	Thr	Tyr	Leu	Asn	Ser	Lys	Ser	Thr	Arg	Ser
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Ser	Val	Lys	Leu	Gln	Gly	Thr	Ser	Lys	Ile	Asp	Asp	Ile	Trp	Asn
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	3545					3550					3555			
Ile	Tyr	Ser	Leu	Trp	Glu	His	Ser	Thr	Lys	Asn	His	Leu	Gln	Leu
	3560					3565					3570			
Glu	Gly	Leu	Phe	Phe	Thr	Asn	Gly	Glu	His	Thr	Ser	Lys	Ala	Thr
	3575					3580					3585			
Leu	Glu	Leu	Ser	Pro	Trp	Gln	Met	Ser	Ala	Leu	Val	Gln	Val	His
	3590					3595					3600			
Ala	Ser	Gln	Pro	Ser	Ser	Phe	His	Asp	Phe	Pro	Asp	Leu	Gly	Gln
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Glu	Val	Ala	Leu	Asn	Ala	Asn	Thr	Lys	Asn	Gln	Lys	Ile	Arg	Trp
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Lys	Asn	Glu	Val	Arg	Ile	His	Ser	Gly	Ser	Phe	Gln	Ser	Gln	Val
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Glu	Leu	Ser	Asn	Asp	Gln	Glu	Lys	Ala	His	Leu	Asp	Ile	Ala	Gly
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Val	Tyr	Asp	Lys	Ser	Leu	Trp	Asp	Phe	Leu	Lys	Leu	Asp	Val	Thr
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Thr	Ser	Ile	Gly	Arg	Arg	Gln	His	Leu	Arg	Val	Ser	Thr	Ala	Phe
	3695					3700					3705			
Val	Tyr	Thr	Lys	Asn	Pro	Asn	Gly	Tyr	Ser	Phe	Ser	Ile	Pro	Val
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Lys	Val	Leu	Ala	Asp	Lys	Phe	Ile	Thr	Pro	Gly	Leu	Lys	Leu	Asn
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Thr	Asp	Leu	Gln	Val	Pro	Ser	Cys	Lys	Leu	Asp	Phe	Arg	Glu	Ile
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Gln	Ile	Tyr	Lys	Lys	Leu	Arg	Thr	Ser	Ser	Phe	Ala	Leu	Asn	Leu
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Pro	Thr	Leu	Pro	Glu	Val	Lys	Phe	Pro	Glu	Val	Asp	Val	Leu	Thr
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Thr	Val	Pro	Glu	Ser	Gln	Leu	Thr	Val	Ser	Gln	Phe	Thr	Leu	Pro
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Lys	Ser	Val	Ser	Asp	Gly	Ile	Ala	Ala	Leu	Asp	Leu	Asn	Ala	Val
	3830					3835					3840			
Ala	Asn	Lys	Ile	Ala	Asp	Phe	Glu	Leu	Pro	Thr	Ile	Ile	Val	Pro
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	3875					3880					3885			
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Phe	Lys	Thr	Glu	Leu	Arg	Val	Arg	Glu	Ser	Asp	Glu	Glu	Thr	Gln
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Tyr	Val	Asn	Lys	Tyr	His	Trp	Glu	His	Thr	Gly	Leu	Thr	Leu	Arg
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Glu	Val	Ser	Ser	Lys	Leu	Arg	Arg	Asn	Leu	Gln	Asn	Asn	Ala	Glu
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Trp	Val	Tyr	Gln	Gly	Ala	Ile	Arg	Gln	Ile	Asp	Asp	Ile	Asp	Val
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Glu	Gly	Gln	Ala	Ser	Phe	Gln	Gly	Leu	Lys	Asp	Asn	Val	Phe	Asp
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Gly	Leu	Val	Arg	Val	Thr	Gln	Lys	Phe	His	Met	Lys	Val	Lys	His
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Leu	Ile	Asp	Ser	Leu	Ile	Asp	Phe	Leu	Asn	Phe	Pro	Arg	Phe	Gln
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	4265					4270					4275			
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Glu Val Leu Arg Asn Leu Gln Asp Leu Leu Gln Phe Ile Phe Gln
 4295 4300 4305
 Leu Ile Glu Asp Asn Ile Lys Gln Leu Lys Glu Met Lys Phe Thr
 4310 4315 4320
 Tyr Leu Ile Asn Tyr Ile Gln Asp Glu Ile Asn Thr Ile Phe Asn
 4325 4330 4335
 Asp Tyr Ile Pro Tyr Val Phe Lys Leu Leu Lys Glu Asn Leu Cys
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 Leu Asn Leu His Lys Phe Asn Glu Phe Ile Gln Asn Glu Leu Gln
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 Glu Ala Ser Gln Glu Leu Gln Gln Ile His Gln Tyr Ile Met Ala
 4370 4375 4380
 Leu Arg Glu Glu Tyr Phe Asp Pro Ser Ile Val Gly Trp Thr Val
 4385 4390 4395
 Lys Tyr Tyr Glu Leu Glu Glu Lys Ile Val Ser Leu Ile Lys Asn
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 Leu Leu Val Ala Leu Lys Asp Phe His Ser Glu Tyr Ile Val Ser
 4415 4420 4425
 Ala Ser Asn Phe Thr Ser Gln Leu Ser Ser Gln Val Glu Gln Phe
 4430 4435 4440
 Leu His Arg Asn Ile Gln Glu Tyr Leu Ser Ile Leu Thr Asp Pro
 4445 4450 4455
 Asp Gly Lys Gly Lys Glu Lys Ile Ala Glu Leu Ser Ala Thr Ala
 4460 4465 4470
 Gln Glu Ile Ile Lys Ser Gln Ala Ile Ala Thr Lys Lys Ile Ile
 4475 4480 4485
 Ser Asp Tyr His Gln Gln Phe Arg Tyr Lys Leu Gln Asp Phe Ser
 4490 4495 4500
 Asp Gln Leu Ser Asp Tyr Tyr Glu Lys Phe Ile Ala Glu Ser Lys
 4505 4510 4515
 Arg Leu Ile Asp Leu Ser Ile Gln Asn Tyr His Thr Phe Leu Ile
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 Tyr Ile Thr Glu Leu Leu Lys Lys Leu Gln Ser Thr Thr Val Met
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Asn Pro Tyr Met Lys Leu Ala Pro Gly Glu Leu Thr Ile Ile Leu
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Arg Gln Gln Thr Glu Trp Gln Ser Gly Gln Arg Trp Glu Leu Ala Leu
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Gly Arg Phe Trp Asp Tyr Leu Arg Trp Val Gln Thr Leu Ser Glu Gln
 50 55 60

Val Gln Glu Glu Leu Leu Ser Ser Gln Val Thr Gln Glu Leu Arg Ala
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Leu Met Asp Glu Thr Met Lys Glu Leu Lys Ala Tyr Lys Ser Glu Leu
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Glu Glu Gln Leu Thr Pro Val Ala Glu Glu Thr Arg Ala Arg Leu Ser
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Lys Glu Leu Gln Ala Ala Gln Ala Arg Leu Gly Ala Asp Met Glu Asp
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Val Cys Gly Arg Leu Val Gln Tyr Arg Gly Glu Val Gln Ala Met Leu
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Gly Gln Ser Thr Glu Glu Leu Arg Val Arg Leu Ala Ser His Leu Arg
 145 150 155 160

Lys Leu Arg Lys Arg Leu Leu Arg Asp Ala Asp Asp Leu Gln Lys Arg
 165 170 175

Leu Ala Val Tyr Gln Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Leu
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Ser Ala Ile Arg Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Val
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Arg Ala Ala Thr Val Gly Ser Leu Ala Gly Gln Pro Leu Gln Glu Arg
 210 215 220

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Ala Gln Ala Trp Gly Glu Arg Leu Arg Ala Arg Met Glu Glu Met Gly
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Ser Arg Thr Arg Asp Arg Leu Asp Glu Val Lys Glu Gln Val Ala Glu
 245 250 255

Val Arg Ala Lys Leu Glu Glu Gln Ala Gln Gln Ile Arg Leu Gln Ala
 260 265 270

Glu Ala Phe Gln Ala Arg Leu Lys Ser Trp Phe Glu Pro Leu Val Glu
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Asp Met Gln Arg Gln Trp Ala Gly Leu Val Glu Lys Val Gln Ala Ala
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Val Gly Thr Ser Ala Ala Pro Val Pro Ser Asp Asn His
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